

# **Tweeting Vertically?**

Elected Officials' Interactions with Citizens on Twitter

# Jahna Otterbacher, Matthew A. Shapiro, Libby Hemphill

Illinois Institute of Technology, {jotterba, mshapir2, lhemphil}@iit.edu

Abstract: Enthusiasts propose that social media promotes vertical political communication, giving citizens the opportunity to interact directly with their representatives. However, skeptics claim that politicians avoid direct engagement with constituents, using technology to present a façade of interactivity instead. This study explores if and how elected officials in three regions of the world are using Twitter to interact with the public. We examine the Twitter activity of 15 officials over a period of six months. We show that in addition to the structural features of Twitter that are designed to promote interaction, officials rely on language to foster or to avoid engagement. It also provides yet more evidence that the existence of interactive features does not guarantee interactivity.

Keywords: Elected officials, Interactivity, Language, Twitter, Vertical communication

New media optimists have claimed that social technologies, such as the micro-blogging service, Twitter, stand to change political communication in positive ways. Many hope that new technologies can help level the playing field between political elites, who enjoy a number of resources to their advantage including access to traditional media channels, and non-elites, who struggle to get their messages out (e.g., Bimber, 1998; Rheingold, 1993). Likewise, there is optimism that new technologies might be harnessed and used to reverse the trend of increasing apathy among citizens in liberal democracies, and particularly among youth (Delli Carpini, 2000).

Currently, we explore if and how elected officials use Twitter to interact with the public. Twitter touts itself as a technology used around the globe. Therefore, to observe a wide variety of ways in which officials use Twitter, we conduct a study of officials in three regions with liberal democratic governments. Particularly, we draw upon datasets used in our ongoing research (Hemphill et al., 2013), in which we are following the tweets of Members of the European Parliament, Korean National Assembly Members, and United States Members of Congress. The goal is to examine qualitatively the types of vertical communication taking place between elected officials and the citizens they represent, and to develop a framework for analysis that can facilitate future work.

Our analysis suggests that while Twitter provides the infrastructure to facilitate a high level of interactivity between political officials and constituents, that not everyone takes advantage of these affordances. We illustrate that Twitter is being used in a variety of ways, from an essentially one-way channel for information provision from official to citizen, to a space in which genuine mutual discourse takes place. In addition, we argue that despite its image as a social technology, many officials use Twitter to engage in para-social interaction rather than human-human interaction. In such cases, officials provide just enough interaction for citizens to respond to them as people (Giles, 2002), while yielding little control of the communication situation to citizens. Finally, we

offer suggestions for analyzing interactivity on Twitter, which considers not only the use of structural features, but also language tactics. Future work can exploit such measures in a large-scale, representative study of officials' behaviors, in order to expand on our initial findings.

# 1. Background and Related Literature

Twitter is "used by people in nearly every country in the world<sup>1</sup>" and elected officials in many regions have adopted it as a part of their communication strategy. One way that Twitter might positively impact political communication is by promoting *vertical communication* between officials and the citizens they represent. For instance, according to the website of the European Parliament (EP), social media is "revolutionizing" the way that MEPs communicate with citizens<sup>2</sup>. The EP views social media as a means to engage citizens, allowing them to "question MEPs themselves."

## 1.1. A Trend toward Interactivity?

But do politicians really interact with citizens? Lilleker and Malagón (2010) point out that politicians are simultaneously the party facing the greatest risk and the greatest potential reward from such encounters. Interactivity can help the politician establish rapport and a sense of connection with citizens (McMillan, 2002b), portraying her as a responsive and capable representative with good intentions. However, the risks include losing ambiguity in the political message, as well as a general loss of control of the communication situation (Stromer-Galley, 2000).

Stromer-Galley (2000) not only finds that politicians are resistant to interactive, vertical communication, but also claims that new technologies allow them to present a façade of interactivity, reaping the benefits while minimizing risks. She distinguishes human-media interactivity (e.g., engaging with content, such as a photo or video) from human-human interactivity (e.g., messaging one's representative and receiving a response). Stromer-Galley and Foot (2002) conducted focus groups with citizens before the 2000 elections in the United States, questioning them about candidates' websites. They found that citizens perceive the possibility for both types of interactivity. However, their needs for interacting with politicians are largely satisfied by human-media interactions, and that they do not demand or expect direct interactions.

#### 1.2. Interactivity on Twitter

Social media are often assumed to be interactive by their very nature. However, CMC researchers consider interactivity to be a variable in any communication setting, and so it is not a characteristic of the medium itself (Rafaeli & Sudweeks, 1997). Indeed, Twitter structures and conventions of use *can* facilitate interactivity (e.g., mentioning or directly addressing someone using "@"; the use of "RT" to rebroadcast another's post). However, as we will show, the provision of these features alone does not guarantee that they will be used in an interactive manner.

The following examples of recent public exchanges between MEPs and citizens illustrate not only the potential risks and benefits to politicians using Twitter, but also the challenges for researchers in terms of studying interactivity.

<sup>&</sup>lt;sup>1</sup> http://twitter.com/about

<sup>&</sup>lt;sup>2</sup> <u>http://www.europarl.europa.eu/news/en/headlines/content/20120220STO38576/html/Social-media-revolutionising-the-way-EP-communicates-with-you</u> (accessed on 23 October 2012).

#### Exchange 1: Marietje Schaake (MEP, Netherlands) and Faceyet (citizen)

**Marietje Schaake**: Anyone looking through the #SyriaFiles who finds something that needs political follow up, feel free to email me.

**Faceyet**: @MarietjeD66 Isn't offering to help with "political follow up" on #SyriaFiles in effect an offer of assistance to #WikiLeaks? #EU #NATO

**Marietje Schaake**: No, I'd look into it, take parliamentary action independently on a daily basis, but based on (multiple) info sources... <u>#Syriafiles</u> <u>@faceyet</u>

#### Exchange 2: Julie Girling (MEP, UK) and Hollicombe (@ToxicTorbay) (citizen)

**Hollicombe**: @juliegirling as our MEP could we ask you about your views on the #hollicombe development in #Torbay, & the possible #publichealthrisk ?

**Julie Girling**: @ToxicTorbay Thanks for getting in touch. As this is a local planning and development matter I urge you to contact local Cllrs and your MP.

## Exchange 3: Alexander Alvaro (MEP, Germany) and Caren S Wood (citizen)

**Caren S Wood**: @AlexAlvaro Sorry me getting personal, but did already someone told you that you look like Mr. George Clooney of the EP? How refreshing!! :))

#### AlexanderAlvaro: @CarenSWood Life could be worse, hm?

In contrast to the latter two exchanges, the official initiates the first one. She does not directly address anyone, but instead extends a general invitation to citizens to contact her. In addition, it's the longest of the three exchanges. The second and third exchanges are both initiated by citizens; the addressed officials respond with a single message, essentially ending the conversations.

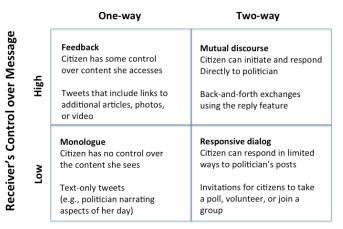
In all three cases, the officials demonstrate that they are responsive to inquiries. However, particularly in exchanges one and two, their responses show that they are simultaneously trying to save face and preserve their political ambiguity. Schaake is put on the spot as to where she stands on WikiLeaks. Rather than answering directly, she counters that she would rely on multiple information sources before acting politically. Similarly, Girling is directly asked where she stands on a particular issue. It is clear that the citizen would like to hear Girling's view ("as our MEP..."), however, Girling deflects the question. The third exchange, in which a fan has contacted an MEP to flirt with him, might be considered as embarrassing or distracting from the political message or image. However, Alvaro uses the exchange to show his sense of humor.

## 1.3. Evaluating Interactivity in CMC

Much research on interactivity in CMC takes one of two approaches: analyzing *structures* provided by the medium or users' *perceptions* of its capabilities (Van Dijk, 1999). In the first camp, researchers have focused on the extent to which interactive features are included in politicians' websites, and have tried to understand how communication approaches correlate to party and demographic characteristics (e.g., Jankowski et al., 2005; Braghiroli, 2010; Lilleker et al., 2011). To contrast, others have argued that interactivity is not only a variable in terms of the structures provided by a medium, but is also a psychological factor (Kiousis, 2002).

McMillan and Downes (2000), taking the user-driven approach, determined that there are two key dimensions to interactivity: the *direction of communication* that may take place between senders and receivers of messages (i.e., one-way versus two-way) and the *level of control* that the message receiver has. McMillan (2002a) subsequently developed a four-part model of cyber-interactivity, which is summarized and related to the case of Twitter in Figure 1. We argue that Twitter use by political officials might fall into any of the four quadrants and provide examples. As will be seen,

we use this framework of cyber-interactivity to guide our exploration of politicians' interactions with citizens via Twitter.



#### **Direction of Communication**

Figure 1: Twitter activity in relation to McMillan's (2002b) model of cyber-interactivity

# 2. Goals and Research Questions

While much previous research considered political officials' use of interactive features in their websites, we are not aware of studies that seek to examine interactivity between political elites and citizens on Twitter. Therefore, our exploratory study seeks to characterize the types of interactivity that politicians are engaging in using this new medium. Inspired by the review of related literature, we propose two research questions:

- RQ1: What is the level of cyber-interactivity of politicians on Twitter?
- RQ2: Do they engage in *mutual discourse* or do they avoid it?

## 3. Data and Method

We consulted our datasets of public officials who use Twitter in their communication strategy. For each region (Europe, South Korea, and the US), we identified five officials<sup>3</sup> who had been active on Twitter from 1 January 2012 to 1 July 2012. We also considered diversity with respect to gender and political party. Details on the officials selected for the study are provided in Table 1.

The dataset comprises nearly all<sup>4</sup> of the officials' tweets during the six-month timeframe. Obviously, this is a multi-lingual dataset. The American officials tweeted exclusively in English and Korean officials in Korean. In contrast, four of the EU MEPs we studied tweeted in at least two languages, with English being used as a lingua franca. All non-English tweets were translated to English using Google Translate<sup>5</sup>, and were verified by a speaker of the source language to ensure the appropriateness of the translations.

<sup>&</sup>lt;sup>3</sup> We note that while some of the officials have since left their positions, all are still active in politics.

<sup>&</sup>lt;sup>4</sup> All Tweets that were being publically displayed by Twitter on 1 July 2012 were captured.

<sup>&</sup>lt;sup>5</sup> http://translate.google.com/

Name (Handle) / Party / Country	Gender	Tweets	Followers				
Alexander Alvaro (@AlexAlvaro), Alliance of Liberals and Democrats for Europe, Germany	М	1,055	2,699				
Julie Girling (@juliegirling), European Conservatives and Reformists, UK	W	258	769				
Rodi Kratsa (@Rodi_Kratsa), European People's Party, Greece	W	405	3,246				
Niccolò Rinaldi (@NiccoloRinaldi), Alliance of Liberals and Democrats for Europe, Italy	М	583	408				
Marietje Schaake (@marietjed66), Alliance of Liberals and Democrats for Europe, Netherlands	W	16,459	13,849				
Seung-Kyu Kang (@kangara), Grand National Party, Korea	М	4,040	14,029				
Kim Jin Pyo (@jinpyokim), Democrat United Party, Korea	М	2,293	12,402				
Yu-Jung Kim (@KimYoojung), Democrat United Party, Korea	W	6,547	22,347				
Young-Gil Kwon (@KwonYoungGhil), Democratic Labor Party, Korea	М	4,030	50,683				
Young-A Park (@youngahPark), Grand National Party, Korea	W	252	3,108				
Virginia Foxx (@virginiafoxx), Republican , US House of Representatives	W	1,393	7,899				
Kirsten Gillibrand (@SenGillibrand), Democrat, US Senate	W	2,859	41,678				
Claire McCaskill (@clairecmc), Democrat, US Senate	W	2,254	70,310				
Thaddeus McCotter (@ThadMcCotter), Republican, US House of Representatives	М	6,113	37,648				
Bernie Sanders (@SenSanders), Independent Senator	М	4,308	107,135				
	1	1	l				

## Table 1: Public officials, party, gender and lifetime Twitter activity statistics

First, we analyzed the official's activity and use of Twitter's *structures* that enable interactivity:

- How many tweets did the official post during the six-month period?
- How often did the official **mention** others?
- How often did the official **reply** to others' tweets?
- How often did the official **retweet**?

We also considered the posting of additional content (photos and videos) that fosters humanmedia interaction. Finally, we read through official's tweets to find illustrative examples of how officials interact with citizens. In particular, we considered the official's use of direct reply, in an effort to understand whether or not these replies are to citizens, and if so, what they concern.

# 4. Analysis

For each group of officials, we first present their activity (i.e., number of tweets posted during the first six months of 2012). We also summarize their use of structures: mentioning another user using "@," retweeting, and direct reply to another user<sup>6</sup>. As a measure of human-human interactivity, we also compute the percent of tweets that are replies. Finally, we characterize each official's interactions with citizens, providing illustrative examples of typical behaviors.

## 4.1. Members of Parliament (European Union)

Handle	Tweets	Mentions	Retweets	Photos	Videos	Replies	% Replies
@AlexAlvaro	420	199	41	4	3	100	23.8
@juliegirling	160	69	33	19	12	6	3.8
@Rodi_Kratsa	160	53	15	0	2	33	20.6
@NiccoloRinaldi	480	180	19	49	19	44	9.2
@marietjed66	3,219	2,813	382	47	39	1,010	31.4

Table 2: EP officials' use of structural features supporting interactivity

## 4.1.1. @AlexAlvaro

@AlexAlvaro, a German MEP who tweets in both English and German, is very responsive to citizens. As shown in Table 2, he focuses more on engaging directly with others, rather than posting content. We observed many cases where he invited citizens to discuss with him, engaging in *mutual discourse*, such as the following:

<u>**@AlexAlvaro**</u> : Why do you need to stay anonymous to be able to express yourself? Must admit that I don't understand that concept... <u>#eurodig</u>

**<u>@ronpatz</u>** : **<u>@AlexAlvaro</u>** because blowing the whistle can get you in jail or just because your opinion is valid without a name, too. **<u>#eurodig</u>** 

<u>**@AlexAlvaro**</u>: <u>**@ronpatz</u> I would disagree about the value of a nameless opinion and...not everyone is a whistleblower (for those I understand) <u><b>#eurodig**</u></u>

## 4.1.2. @juliegirling

@juliegirling's interactivity is mainly *feedback*, with rare direct exchanges. She frequently posts links to content including her monthly newsletter or pictures of events she attended. Even her direct interactions with citizens focus on information provision rather than critical discussion:

<u>**@treiziemeetoile</u>** : <u>**@juliegirling**</u> quick question if I may: is Mrs Girling participating in the EP ASEAN delegation to Burma this week, meeting Aung San Suu Kyi?</u>

**<u>@juliegirling</u>** : **<u>@treiziemeetoile</u>** yes that's correct. Information about the visit to follow in the coming weeks. via <u>http://www.juliegirling.com</u>

<sup>&</sup>lt;sup>6</sup> We note that if users did not use the features provided by Twitter to engage in these activities (e.g., marking a tweet with "MT" but not using the retweet function) then they will not be captured in our statistics.

## 4.1.3. @Rodi\_Kratsa

@Rodi\_Kratsa's use of Twitter includes *monologue* and *mutual discourse* and she tweets in both Greek and English. She often positions herself on current issues, and does not post much additional content. More than 20% of her tweets are direct replies, and we observed several exchanges in which citizens ask her to do something:

**<u>@billhicks6</u>** : **<u>@Rodi\_Kratsa</u>** Could you bring up the case of the suicides in the EP, and ask that they be investigated as a case of murder by negligence or intention? [Referring to the increasing rate of suicide in Greece, during the financial crisis.]

<u>**@Rodi\_Kratsa**</u> : <u>**@billhicks6**</u> Soon, I will be taking other initiatives on the matter of the suicides.

## 4.1.4. @NiccoloRinaldi

@NiccoloRinaldi tweets primarily in Italian with an occasional English tweet. He typically tweets in the *feedback* mode, posting content to engage constituents, such as photos and videos. Almost 10% of his tweets are replies, in the *mutual discourse* mode. Of interest was his interaction with citizens during the recent ACTA vote in the EP, such as this exchange with a student:

@antodicarlo @NiccoloRinaldi #ACTA. What is this?

<u>@NiccoloRinaldi</u> @antodicarlo See <u>http://www.niccolorinaldi.it</u> for more information. It's an anti-counterfeiting agreement that would affect Internet freedom as well as access to medicines.

## 4.1.5. @marietjed66

@marietjed66 is the most active and interactive official we observed. She tweets in both English and Dutch using *feedback* and *mutual discourse*. As previously noted, she often poses questions and invitations to engage citizens. She is also responsive to unsolicited inquiries, such as the following:

**@AmQamar** : Hello! May I ask what you are doing at the european level to solve the problems of the persecutd ahmadiyya community? **@MarietjeD66** 

@MarietjeD66 : @AmQamar we highlight it in our human rights work on Pakistan etc [con't]

**@AmQamar** : **<u>@MarietjeD66</u>** Dont want to hold u up, but just to inform u that I have also visited your website and seen ur work. I appreciate your work.

@MarietjeD66 : @AmQamar thankyou

While many officials post quick, one-off responses to citizens' questions, @marietjed66 frequently has extended exchanges. In interactions such as this one, it is obvious that citizens appreciate the time officials take in responding to their questions.

## 4.2. National Assembly Members (Korea)

Handle	Tweets	Mentions	Retweets	Photos	Videos	Replies	% Replies
@kangnara	820	392	69	100	2	124	15.1
@jinpyokim	200	84	8	30	1	55	27.5
@KimYoojung	1,379	882	18	83	2	715	51.8
@KwonYoungGhil	779	394	74	30	9	15	1.9
@YoungahPark	120	28	15	20	0	8	6.7

 Table 3: Korean officials' use of structural features supporting interactivity

## 4.2.1. @kangnara

Citizens often initiated interaction with @kangnara, and he always responded politely. That said, we noted that he frequently responded with generic replies, such as the following:

@kangnara: Thank you for your encouraging words. I'll do my best to lead.

This is not surprising given that direct interaction with constituents is time consuming (Stromer-Galley, 2000). Another characteristic of @kangnara is that he often posted pictures; we counted a total of 100 photos. Typical photos included him attending official and family events and sports. We characterize @kangnara's use of Twitter as featuring both *mutual discourse* and *feedback*.

## 4.2.2. @jinpyokim

@jinpyokim is very open to answering questions from constituents; nearly a third of his posts are replies. Citizens often want information from him, as illustrated in the following exchange:

**<u>@sununiv\_in</u>** : **<u>@jinpyokim</u>** The Yeongtong subway construction is often taking too long. Do you care to comment?

**<u>@jinpyokim:</u> @sununiv\_in:**</del> By the end of this year, the train line should be constructed all the way to Mangpo Station. Announced in 2000 with construction not beginning until 2006 for various reasons, with no budget problems, there's been progress. Please be patient for just a little while longer.

We also observed him interacting with students, who asked him to complete a survey, and he quickly responded to their request. @jinpyokim spends a good deal of his time in *mutual discourse*, and engages in the *feedback* mode of interactivity as well.

## 4.2.3. @KimYoojung

@KimYoojung is very prolific, typically posting several tweets each day. In addition to professional activities, she often mentions day-to-day details, which add a personal touch:

I've got to have a strong, sugary cup of coffee! Even when there's a lot going on, a strong cup starts the day!

Over half of her tweets are responses to others in *mutual discourse*. Many of these interactions are, similar to those of her colleagues, words of encouragement and "thank you's." For example:

**<u>@lafe12:</u>** <u>@KimYoojung</u>: Senator, the last four years have been difficult and filled with anxiety. Thank you for your hard work.

<u>@KimYoojung: @lafe12</u>: Thanks~^^ We've missed you! How have you been?

## 4.2.4. @KwonYoungGhil

While @KwonYoungGhil is quite prolific, he exchanges very few messages with others. He fosters human-media engagement by occasionally posting photos and videos. He tweets about strikes and economic injustices, positioning himself in relation to the events or issues, as follows:

**<u>@KwonYoungGhil</u>** : Children are often referred to as "the treasures of our country". Where to spend money if not on them? Free childcare should not be interrupted.

@KwonYoungGhil's use of Twitter falls mainly into two modes: *monologue* and *feedback*.

# 4.2.5. @YoungahPark

@YoungahPark is the least prolific of the Korean officials we studied. Her tweets often focus on issues of education and her own views, without prompting a reply from citizens:

**<u>@YoungahPark</u>** : Teacher evaluation in the Teacher Evaluation Bill is now being discussed at the curriculum general meeting. It's a shame that it was unanimously supported three years ago at the meeting, but it still has not been passed. The situation is very frustrating. Sorry to the people who are waiting for this bill to pass.

We observed @YoungahPark using monologue, feedback and to a lesser extent, mutual discourse.

# 4.3. Members of Congress (United States)

Handle	Tweets	Mentions	Retweets	Photos	Video	Replies	% Replies
@virginiafoxx	240	131	67	17	11	0	0
@SenGillibrand	804	495	109	64	14	6	0.7
@clairecmc	220	50	8	25	3	14	6.2
@ThadMcCotter	838	683	201	59	122	68	8.1
@SenSanders	825	266	23	89	91	0	0

Table 4: US officials' use of structural features supporting interactivity

# 4.3.1. @virginiafoxx

@virginiafoxx exhibits a press agency style of use rather than an effort to interact directly with citizens. For instance, we observed the following message multiple times:

@virginiafoxx: Help me reach 2,000 likes on Facebook! If you follow me on Twitter, be sure to check out & like my Facebook page! [URL]

She had no direct exchanges with anyone. She often mentions and retweets other political elites, however, we were unable to find a single mention or retweet of a citizen. @virginiafoxx tweeted several photos, which often depicted visits to companies and other organizations. It is clear that @virginafoxx avoids *mutual discourse*; her primary mode is *feedback* with limited *responsive dialog*.

# 4.3.2. @SenGillibrand

@SenGillibrand's activity takes a personal tone, but still primarily is in *feedback* mode. Her tweets are generally written in the first person, and she often posts photos of professional and family activities, as in the following:

**@SenGillibrand**: Last night, I took Henry, Theo & a friend to Congressional Night at the Natl **@AirandSpace** Museum. They loved it! <u>pic.twitter.com/pNswZejr</u>

While @SenGillibrand does avoid *mutual discourse*, she often uses mentions to give kudos to civic groups and individuals involved in work and causes that she supports:

**@SenGillibrand:** Congrats <u>@ReshmaSaujani</u> on the amazing <u>@GirlsWhoCode</u> project in <u>#NYC</u> & its new partnership w/<u>@Twitter http://bit.ly/MQOvok</u> <u>#offthesidelines</u>

#### 4.3.3. @clairecmc

Similar to @SenGillibrand, @clairecmc's tweets have a personal tone, generally written in the first person voice. She occasionally posts photos, often with family members. While @clairecmc had relatively few replies to others (6.2% of her posts), we did observe some interesting interactions with citizens. For example, in one, she defends herself against a citizen's criticism:

<u>@mrsdeedum</u>:"<u>@FSMidwest</u>: <u>@clairecmc</u> Got her GAME 6 ticket signed [URL] but who paid 4 it? You or lobbyist?

@clairecmc : @mrsdeedum I paid for my own ticket. Always do.

In summary, @claircmc is primarily tweeting in the *feedback* mode, with some *mutual discourse*.

#### 4.3.4. @ThadMcCotter

While @ThadMcCotter interacts primarily with other politicians and the media, he does engage in exchanges with citizens, which he often initiates, such as the following example:

@ThadMcCotter: Lunch with one of Michigan's finest at USAG-Yongsan. <u>#TM12</u> [URL]

**@AndrewHemingway**: **@ThadMcCotter** killer bow tie! If @repschock will stop hogging GQ I think you have a chance

Similar to @SenGillibrand and @clairecmc, @ThadMcCotter tweets about both professional and personal interests. However, whereas the former often tweet about their families, @ThadMcCotter often had exchanges about TV shows or his home sports teams. His tweets are primarily written in the first person voice. He makes extensive use of both *mutual discourse* and *feedback*.

#### 4.3.5. @SenSanders

@SenSanders notes that his staff tweet for him. We counted 65 tweets that were noted as being written by Senator Sanders himself (7.9%). Like @virginiafoxx, @SenSanders does not use direct replies. The dominant voice of the posts is the third person. @SenSanders is also fond of posting questions that provoke citizens to think about an issue, and engages them with additional content:

<u>**@SenSanders**</u>: The CEOs of 15 top U.S. and European banks got an average raise of 12% last year. Did you get a raise last year? [URL]

@SenSanders extensively uses the *feedback* mode of interacting, however, he also makes use of *responsive dialog*, as in the following examples in which citizens are invited to participate in polls:

<u>**@SenSanders**</u>: Should the US continue to subsidize the fossil fuel industry? Let Bernie know here: [URL] <u>#Energy #Oil</u> <u>#Gas</u>

## 5. Discussion

Twitter provides a number of features designed to facilitate interaction. Some promote humanmedia interaction (e.g., posting a URL or photo) while others enable direct, human-human interaction (e.g., mentioning, which often leads to a reply). Structurally, Twitter has the capacity to put citizens in direct contact with their representatives. However, the provision of the functionality alone does not guarantee that the medium will be fully exploited.

We identified several officials who regularly engaged in *mutual discourse* with citizens. Many of them exhibit a willingness to answer inquiries in a polite and timely fashion. Even more encouraging, some, in particular @AlexAlvaro and @marietjed66, explicitly invited citizens to discuss issues with them, and engaged in more than simple, one-off exchanges.

#### 5.1. Para-social interaction

On the other hand, we observed those who remained in the *feedback* and *responsive dialog* modes. For instance, @virginiafoxx and @SenSanders had no direct exchanges with others. Both promoted their Web presences elsewhere in order to drive traffic there (e.g., Foxx's Facebook) or to collect feedback from the public (e.g., Sanders' polling site). Many also used Twitter in *monologue* mode, simply posting updates and views on current events and issues.

It may be that many politicians, despite having adopted Twitter, have no desire to engage in *mutual discourse*. What do these officials gain by using social technologies in ways that are less than fully interactive? McMillan (2002a) explains a possible effect of the "lesser" forms of interactivity. She describes how *para-social interaction* can occur as a result of human-content interaction. She claims that even when there is limited ability for human-to-human interaction, that message receivers can develop a feeling of being close to message senders. Thus, some politicians interact just enough to get constituents to identify with them, without having to yield much control in the exchange, and without having to invest the energy necessary to sustain mutual discourse.

#### 5.2. Analyzing Interactivity

We examined the extent to which officials use interactive features of Twitter. Our qualitative analysis revealed something that needs to be addressed – how officials use language in conjunction with Twitter's structures. We observed how @MarietjeD66 and @AlexAlvaro posed provocative questions or invitations to encourage constituents to interact. Likewise, we saw the importance of "thank you's" issued promptly in response to citizens' inquiries. Hyland (2005) explains that writers use linguistic tactics to engage readers, highlighting features such as pronouns (e.g., the use of "you" to directly address readers, or "we" to create a sense of in-group belonging). In future, we will consider how officials use such tactics. It may be that using engaging language, along with Twitter's structures, is key to its use in direct interaction with citizens.

## 6. Conclusion

Politicians' Twitter use varies in terms of how interactive they are. We observed interesting cultural differences that warrant further study; American officials were significantly less interactive as compared to Europeans and Koreans. We plan to conduct a large-scale study to see if the patterns observed are representative of the way politicians are using Twitter.

In conclusion, Twitter has much potential for promoting interactive, vertical communication. Of course, it's unrealistic to expect that all or even most officials will use Twitter in a highly interactive way, and we observed officials who did not exploit its interactive potential. We are most disturbed by researchers' claims that citizens, who are aware of the interactive potential of new technologies, do not demand interaction with their representatives (Stromer-Galley & Foot, 2002). We hope that further work might show positive examples of interactive communication that will at the very least encourage citizens to try to engage officials via new media such as Twitter.

#### References

Bimber, B. (1998). The Internet and Political Mobilization: Research Note of the 1996 Election Season. *Social Science Computer Review*, 16 (4), 391-401.

Braghiroli, S. (2010). Politicians Online! MEP Communication Strategies in the Internet Era. *EPIN Working Paper No. 29, Available at SSRN: http://ssrn.com/abstract=2001356.* 

- Delli Carpini, M.X. (2000). Gen.com: Youth, Civic Engagement, and the New Information Environment. *Political Communication* 17, 341-349.
- Giles, D.C. (2002). Parasocial Interaction: A Review of the Literature and a Model for Future Research. *Media Psychology* 4 (3), 279-305.
- Hemphill, L. & Shapiro, M.A. & Otterbacher, J. (2013). What's Congress doing on Twitter? *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2013)*, San Antonio, TX, February 2013.
- Hyland, K. (2005). Stance and Engagement: A Model of Interaction in Academic Discourse. *Discourse Studies* 7 (2), 173-192.
- Jankowski, N.W. & Foot, K. & Kluver, R. & Schneider, S. (2005). The Web and the 2004 EP Election: Comparing Political Action Web Sites in 11 EU Member States. *Information Polity 10*, 165-176.
- Kiousis, S. (2002). Interactivity: A Concept Explication. New Media & Society 4 (3), 355-383.
- Lilleker, D.G. & Koc-Michalska, K. & Schweitzer, E.J. & Jacunski, M. & Jackson, N. & Vedel, T. (2011). Informing, Engaging, Mobilizing or Interacting: Searching for a European Model of Web Campaigning. *European Journal of Communication 26 (3)*, 195-213.
- Lilleker, D.G. & Malagón, C. (2010). Levels of Interactivity in the 2007 French Presidential Candidates' Websites. *European Journal of Communication 25 (1)*, 25-42.
- McMillan, S.J. & Downes, E.J. (2000). Defining Interactivity: A Qualitative Identification of Key Dimensions. *New Media & Society 2* (2), 157-179.
- McMillan, S.J. (2002a). Exploring Models of Interactivity from Multiple Research Traditions: Users, Documents and Systems. *The Handbook of New Media*, pp. 163-182.
- McMillan, S.J. (2002b). A Four-part Model of Cyber-interactivity: Some Places are more Interactive than Others. *New Media & Society* 14 (2), 271-291.
- Rafaeli, S. & Sudweeks, F. (1997). Networked Interactivity. Journal of Communication 2 (4).

Rheingold, H. (1993). The Virtual Community: Homesteading on the Electronic Frontier. New York: Harper.

- Stromer-Galley, J. (2000). On-line Interaction and why Candidates Avoid it. *Journal of Communication* 50 (4), 111-132.
- Stromer-Galley, J. & Foot, K. (2002). Citizen Perceptions of Online Interactivity and Implications for Political Campaign Communication. *Journal of Computer-Mediated Communication 8 (1)*.

Van Dijk, J. (1999). The Network Society: Social Aspects of New Media. Thousand Oaks: Sage.

#### About the Author/s

#### Jahna Otterbacher

Jahna (Ph.D., University of Michigan - Ann Arbor, USA) is a communication and information scientist. Her endeavor is to discover patterns in the use of language and other communicative devices in order to better facilitate technology-mediated interactions, enhancing access to information.

#### Matthew A. Shapiro

Matthew (Ph.D., University of Southern California - Los Angeles, USA) is a trained political economist. His overarching goal is to understand problems associated with the sharing and receipt of information, both of which have implications for the policy-making process. He examines information sharing in the context of R&D collaboration, and he studies the receipt of information in the context of how it is framed.

#### Libby Hemphill

Libby (Ph.D., University of Michigan - Ann Arbor, USA) is a communication and information scientist. Her research focuses on collaboration and social media. She is especially interested in understanding and designing social media tools to facilitate collaborations both at work and at play.